a. providing an object with a transmitter which upon activation transmits a unique signal, wherein the transmitter includes a non-synchronized time/frame counter to indicate a length of time during which the signal is transmitted;

b. providing at least three stations for receiving data contained in the signal transmitted from the object and then transferring the data to a central processing station; and

c. providing means at the central processing station to use the data in performing calculations to determine the impact location of the object.

[Amend Claim 2 to read as follows:]

2. (Amended) A process as defined by Claim 1, wherein the process comprises the additional steps of:

d. placing the receiving stations in a triangular configuration having an area which creates a spatial plane that geographically includes the target;

e. determining the linear distances between the receiving stations and the central processing station;

f. defining the spatial plane by a coordinate system to perform the calculations at the central processing station, whereby the spatial plane is correlated to the geographical plane of the target range by an algorithm; and

g. determining correction factors which are used to adjust for signal delays in transferring data from the receiving stations to the central processing station, whereby the correction factors are based upon the differences in linear distances between the receiving stations and the central processing station.

Amend Claim 10 to read as follows:

10. (Amended) A process for determining an impact location of a transmitter-bearing object within a geographical area containing a target, wherein the process comprises the steps of:

a. providing an object with a transmitter which upon activation transmits a unique signal, wherein the transmitter includes a non-synchronized time/frame counter to indicate a length of time during which the signal is transmitted;

b. providing at least three stations for receiving data contained in the signal transmitted from the object and then transferring the data to a central processing station; and

c. providing means at the central processing station to use the data in performing calculations to determine the impact location of the object, wherein the calculations performed at the central processing station are performed using the following mathematical formula:

(g) (d) (a)

$$\cos^{-1}\left(\frac{(x+t_2)^2+(x+t_1)^2-D_3^2}{2\times(x+t_2)\times(x+t_1)}\right)+\cos^{-1}\left(\frac{x^2+(x+t_2)^2-D_2^2}{2\times(x+t_2)\times x}\right)+\cos^{-1}\left(\frac{(x+t_1)^2+x^2-D_1^2}{2\times(x+t_1)\times x}\right)=360$$

wherein x is the unknown amount of time required for the signal upon impact of the transmitter-bearing object to reach the closest receiving station, the receipt of the signal serving to activate the counters at each receiving station; t_1 is the amount of time in addition to x required for the signal upon impact of the transmitter-bearing object to reach the next closest receiving station; t_2 is the amount of time in addition to x required for the signal upon impact of the transmitter-bearing object to reach the farthest receiving station; D_1 is the distance between the first and second receiving stations; D_2 is the distance between the first and third receiving stations; and D_3 is the distance between the second and third receiving stations.

Amend Claim 11 to read as follows:

11. (Amended) A process for determining an impact location of a transmitter-bearing object within a geographical area containing a target, wherein the process comprises the steps of:

a. providing an object with a transmitter which upon activation transmits a unique signal, wherein the transmitter includes a non-synchronized time/frame counter to indicate a length of time during which the signal is transmitted;

b. providing at least three stations for receiving data contained in the signal transmitted from the object and then transferring the data to a central processing station; and

c. providing means at the central processing station to use the data in performing calculations to determine the impact location of the object, wherein the calculations performed at the central processing station are performed using the following mathematical formula:

(g) (d) (a)

$$\cos^{-1}\left(\frac{(x+t_2)^2+(x+t_1)^2-D_3^2}{2\times(x+t_2)\times(x+t_1)}\right)+\cos^{-1}\left(\frac{x^2+(x+t_2)^2-D_2^2}{2\times(x+t_2)\times x}\right)+\cos^{-1}\left(\frac{(x+t_1)^2+x^2-D_1^2}{2\times(x+t_1)\times x}\right)=360$$

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wherein x is the unknown amount of time required for the signal upon impact of the transmitter-bearing object to reach the closest receiving station, the receipt of the signal serving to activate the counters at each receiving station; t_1 is the amount of time in addition to x required for the signal upon impact of the transmitter-bearing object to reach the next closest receiving station; t_2 is the amount of time in addition to x required for the signal upon impact of the transmitter-bearing object to reach the farthest receiving station; D_1 is the distance between the first and second receiving stations; D_2 is the distance between the first and third receiving stations; and D_3 is the distance between the second and third receiving stations; and wherein D_1, D_2 and D_3 are constant values.